An Introductory Guide for Participation in ISO New England Processes

Q. What is ISO New England and what does it do?

A. ISO New England, Inc. (ISO-NE) operates the electric transmission system or "grid" for all of the six New England States, including Connecticut, Rhode Island, Massachusetts, Vermont, New Hampshire and Maine. ISO-NE is the independent system operator (ISO) and regional transmission organization (RTO) for its territory, shown in blue in the below map. It covers all of New England except the far Northeast of Maine. ISO-NE is headquartered in Holyoke, Massachusetts.

As an RTO, ISO-NE coordinates the flow of electricity across the high-voltage, long-distance power lines in the New England region. ISO-NE develops market and reliability rules so that the grid operates reliably and safely. In the absence of such coordination, the flow of electricity could be limited on portions of the electric transmission grid, which is known as "congestion." Just as vehicle traffic can become congested due to weather or road repair, the electric grid can become congested due to heavy demand during times of system stress (e.g., hot or cold weather) or because a transmission line is down for maintenance. ISO-NE manages the flow of electricity and has a control room to monitor congestion and emergencies on the grid at all times. You can think of this as being somewhat similar to an air traffic controller station at an airport, with ISO-NE system operators maintaining awareness to evolving circumstances or new issues developing on the grid in order to maintain electric flow, reduce congestion, and prevent outages and emergencies.

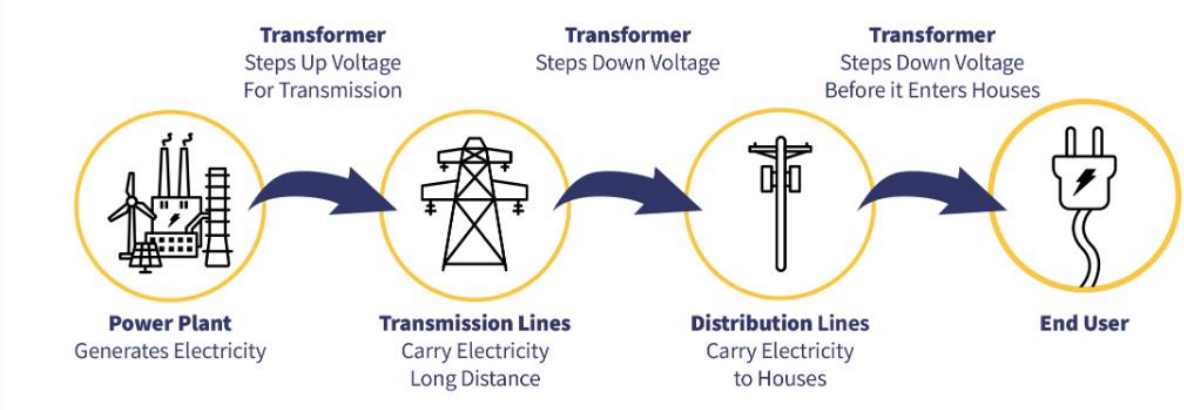
ISO-NE is one of seven ISOs or RTOs (collectively referred to as "RTOs/ISOs") that the Federal Energy Regulatory Commission (FERC) has overseen the development of since the late 1990s. RTOs/ISOs are non-profit entities designed to ensure non-discriminatory access to the grid, so that sellers and buyers of wholesale electricity are able to connect with ease and efficiency and achieve competitive, fair, market-based prices reflecting supply and demand. In addition to operating the grid, another key part of ISO-NE's activities is the day-to-day business of running wholesale electricity markets in its territory, which is an intricate operation that relies on complex market rules. ISO-NE develops these market rules based in part on input from stakeholders (representatives from different groups, such as electric suppliers and marketers, consumer organizations, utilities, and others) and rulings by FERC. FERC has regulatory oversight over ISO-NE's activities.

Q. What does it mean when you refer to the "wholesale electricity transmission system" or the "grid?"

A. ISO-NE, under FERC jurisdiction, operates high-voltage transmission lines that move wholesale electricity throughout its territory, often across significant distances. By contrast, local power lines that deliver electricity to retail customers on utility poles are considered to be local "distribution," and are generally subject to state or local regulation and jurisdiction.

One key distinction between transmission lines and distribution lines is voltage: in general, local distribution lines are lower voltage – typically 100 kilovolts or less – and high-voltage transmission lines are typically everything above that. ISO-NE operates (and FERC regulates) the high-voltage transmission lines and approves the rates for the electricity that flows on those lines. This is called the "wholesale electricity transmission system" or the "grid" for New England.

The following diagram illustrates how electricity travels, including ISO-NE's operation of transmission lines subject to FERC's jurisdiction[i]:



You have probably seen tall poles carrying electricity along a strip of land that look like the tall metallic pole above (second from the left); this is an example of high voltage electricity transmission managed by ISO-NE in its territory.

Q. Does ISO-NE own the electric transmission infrastructure that it operates?

A. No – ISO-NE operates those lines but does not own them. Utilities that choose to join ISO-NE continue to own the transmission infrastructure (lines and poles and other equipment) but hand over operational control to ISO-NE. ISO-NE is called an "*independent* system operator" or "ISO" because it has independent authority, overseen by FERC, to operate the transmission lines owned by the utilities. FERC has also designated ISO-NE as the "regional transmission organization" or "RTO" for New England.

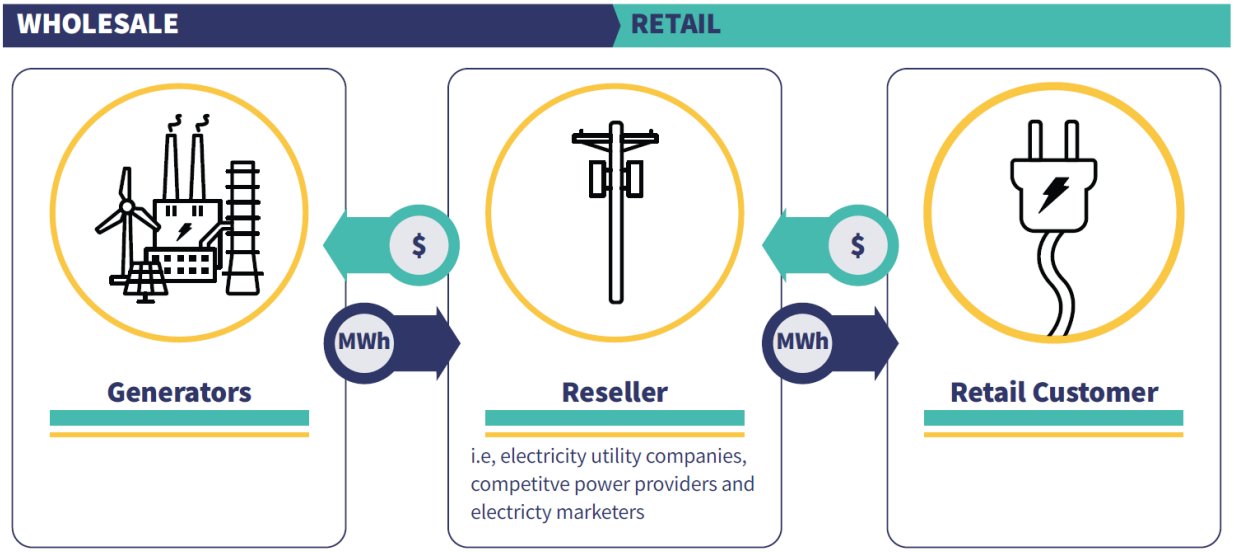
Utilities that join and turn over functional control of their transmission assets to ISO-NE are referred to as "participating transmission owners." In return, such utilities receive just and reasonable rates through ISO-NE when those transmission facilities are used, with the payments allocated in accordance with ISO-NE rules.

Q. What does "wholesale electricity" mean, and why does ISO-NE operate a market for it?

A. To understand wholesale sales of electricity, consider the graphic below. In the graphic, the electric generation plant (Generator) sells electricity to a utility or other company (Reseller) who in turn intends to resell that electricity to homes and businesses (Retail Customer). The sale from Generator to Reseller is a wholesale sale of electricity and FERC almost always has jurisdiction over the rates charged for that sale. Wholesale sales in ISO-NE's territory are in interstate commerce because of the interconnected grid across numerous state lines.

Wholesale sales of electricity can be contrasted with "retail" sales of electricity to customers. When your local utility sells you electricity for use in your home or business, that is a retail sale, not wholesale, and is <u>not</u> under the jurisdiction of FERC. In ISO-NE and the other RTOs/ISOs, the local utility company provides retail electric service. The rates those retail utilities charge are regulated by a state utility regulatory commission (for privately owned utilities), by a city (for municipal utilities), or by a cooperative board (for rural electric cooperatives).

If you have concerns about your retail electric bill or service, the right place to address those concerns is with your utility, the applicable local regulatory authority, or your state public utility commission - not ISO-NE or FERC.



Q. Why are ISO-NE processes and markets important?

A. Although ISO-NE is not directly involved with your electric bill or the electric service to your home or business (as noted above, those tasks are met by your utility), ISO-NE makes decisions that can have a major impact on the price and reliability of electricity in your area as well as on the implementation of key state and federal energy and environmental policies.

For example, it is ISO-NE's responsibility to balance demand for electricity with the available supply through operation of its wholesale electricity market. Electric grids must run in balance, i.e., the electricity coming onto the grid must equal the electricity being used on the grid at all times. ISO-NE, like all RTOs/ISOs, achieves this essential balancing function through the real-time energy market. In the real-time energy market, ISO-NE procures energy from electricity sellers for immediate delivery, with prices calculated at five-minute intervals based on actual system operating conditions.

In addition to the real-time energy market, ISO-NE also manages a day-ahead energy market, certain ancillary services markets to procure special products, and a capacity market to procure electricity supply for longer-term reliability needs. In the day-ahead energy market, prices are calculated for the next day based on the amount of energy that electricity suppliers offer to produce and the estimated amount needed by consumers. For reasons we will discuss below, most electric energy is bought and sold in the day-ahead energy market. For ISO-NE's capacity market, called the Forward Capacity Market, ISO-NE procures power supplies three-plus years in advance of need with the goal of ensuring long-term grid stability.

(i) Day-Ahead Energy Market

The day-ahead energy market schedules generators (supply) to meet forecasted load (demand) one day in advance, with forecasts influenced by many factors, especially weather. The day-ahead market consists of a bidding process that utilizes supply and demand fundamentals. ISO-

NE uses a computerized market model that matches supply and demand throughout its footprint for each operating hour of the next day, with the system designed to select the lowest-cost bids that will meet the electricity needs. The day-ahead approach gives generation owners and other suppliers time to plan, schedule workers and shifts (as large plants need to be started up well in advance of production) and make any necessary fuel arrangements. The majority of energy transactions take place in the day-ahead market rather than the real-time market.

The day-ahead market further allows ISO-NE to manage transmission congestion that may arise from prevailing conditions, especially weather. Transmission congestion occurs when a portion of the transmission grid becomes overloaded with electric power that can prevent efficient market transactions from taking place. Such overloading can cause a transmission line to retain heat, stretch and, in an extreme case, come in physical contact with other transmission lines, structures, or vegetation, which can create a hazard or outage. To avoid this, ISO-NE forecasts demand and designs its market rules to choose the lowest-cost resources, subject to any anticipated congestion constraints on the transmission system. This might mean that a generator or other supply resource located close to an area of heavy demand (for example, a large town or city) could be scheduled to produce electricity on a certain day even if it is not the lowest-cost resource.

(ii) Real-Time Energy Market

Through the real-time energy market, ISO-NE reconciles differences between forecasted and real-time load (demand), or other unforeseen system conditions, which may arise from issues such as unplanned outages of generators, unexpected levels of congestion on electric transmission lines, or increased demand for electricity due to more extreme weather than forecast. Where there is a shortfall of electric supply in real-time, ISO-NE procures electricity for immediate delivery from power suppliers that are synchronized to the electric grid and can increase their supply (or, for a demand response resource, reduce demand) in real-time. The lowest-cost supply bids that can meet the updated demand will be selected first, to help ensure prices remain as low as possible. ISO-NE, with the help of computer software, monitors and re-evaluates 24 hours a day to be prepared to add resources in real-time when needed for reliability.

(iii) Forward Capacity Market (FCM)

Unlike real-time and day-ahead energy markets, which are concerned with meeting the near-term demand for electricity, ISO-NE's capacity market, FCM, is a planning tool that encourages financial investment in existing or new generators and other power supply resources to promote reliability over a longer term. ISO-NE produces a load forecast, an estimate of peak demand and how much power it will need to meet reliability requirements in each area of the system, just over three years in advance of the delivery year. The capacity market consists of a bidding process that utilizes supply and demand fundamentals to compensate existing or new

resources. ISO-NE then pays generators that are selected through the capacity market the appropriate capacity revenues, based on their location, in return for the future promise of delivering electricity when needed. The revenues received from capacity markets allow power supply resources to recover costs that are generally not recovered in the energy markets, such as long-term fixed costs. There can also be penalties if a generator or other power supply resource fails to meet its advance commitment to supply electricity when needed, particularly during system emergencies.

(iv) Ancillary Services Markets

ISO-NE has other specialized products and services that it procures through its "ancillary services" markets to control the critical balance of supply and demand on the grid. For example, the grid needs resources in reserve to deal with unexpected and sudden events, like a generator outage. ISO-NE has a Forward Reserve Market to acquire commitments from resources ahead of time to provide reserve capacity on short notice. ISO-NE holds two auctions a year to procure this service. ISO-NE needs and procures three types of reserves: (1) Ten-Minute Spinning Reserves (resources that can respond to a signal from ISO-NE within ten minutes and are already synchronized to the grid); (2) Ten Minute Non-Spinning Reserves (resources than can respond in ten minutes but may not already be synchronized to the grid); and (3) Thirty Minute Operating Reserves (resources that can respond within thirty minutes to a signal from ISO-NE but may not already be synchronized to the grid).

Another key ancillary service market is for the technical product called "regulation." Regulation is necessary to balance generation and load on the grid and maintain the proper frequency. The Regulation Market compensates market participants to provide regulation service, which depends on the capability of specially equipped power suppliers to increase or decrease output or consumption every four seconds. To participate in this market, suppliers need to relinquish some control to ISO-NE so that it can balance second-by-second variations in demand and the system frequency.

The growth of inverter-based resources, such as solar, wind, and battery storage, on the New England grid is changing the needs for ancillary services in comparison with the former grid that was more heavily focused on a smaller number of large resources. In some circumstances, inverter-based resources can also participate in providing ancillary services.

Q. How is ISO-NE governed?

A. ISO-NE has an executive team of officers and is overseen by an independent Board of Directors (Board) consisting of ten members. ISO-NE elects new Board members through a nominating process that involves representatives from the current board, the New England Power Pool (NEPOOL), and the New England Conference of Public Utilities Commissioners (NECPUC). Candidates also receive the endorsement of the top stakeholder committee, the NEPOOL Participants Committee. Nine of the directors are so elected and the President and CEO of ISO-NE serves as the tenth director by virtue of the office. Each member serves a three-

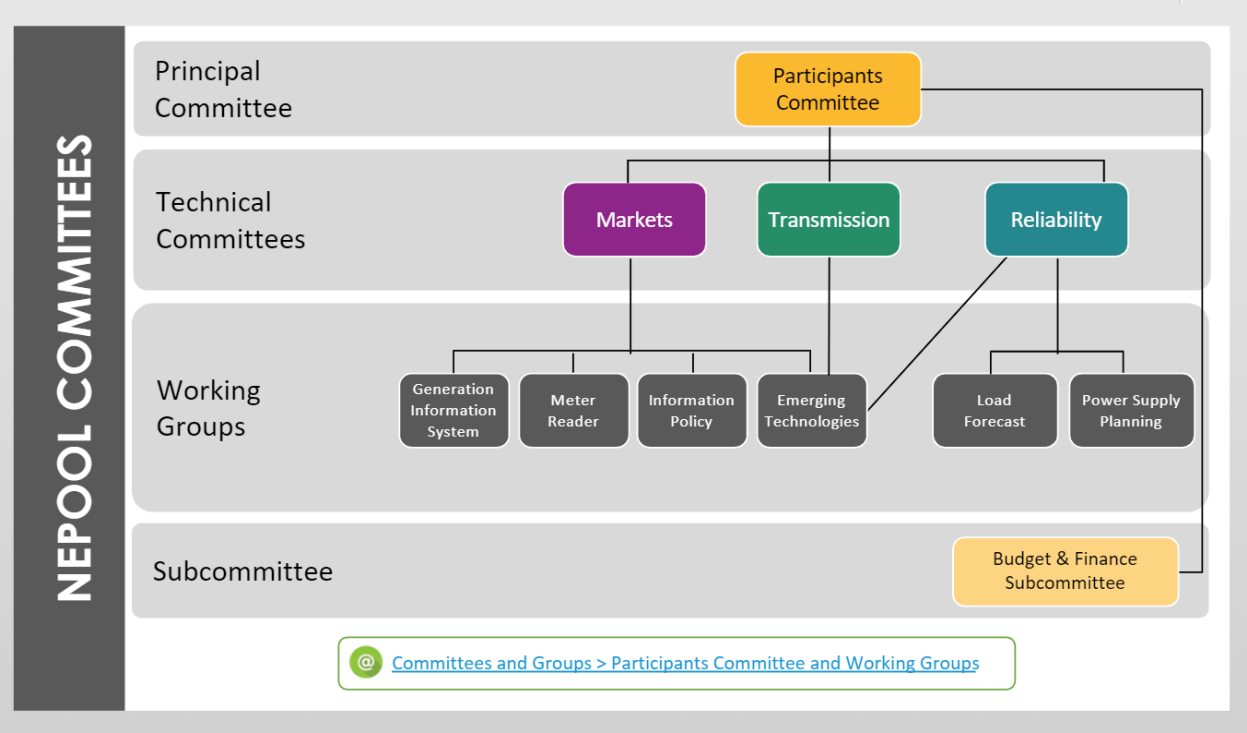
year term. The ISO-NE website contains information about the current members of the Board (including the ISO-NE President and CEO).[ii]

Q. What stakeholder processes does ISO-NE have?

A. Much of the decision-making authority for the region rests with the ISO-NE Board, but there are stakeholder processes that provide input to the ISO-NE Board and can impact proposals to FERC. The stakeholder processes for ISO-NE consider market rule changes, adjustments to the rules governing transmission operation and cost allocation, and other regional electric matters.

The primary stakeholder process is run through NEPOOL and is called locally the "NEPOOL process." The NEPOOL organization actually predates ISO-NE by several decades and was started as a set of power sharing arrangements among traditional electric utilities to deal with shortage conditions, but the current role of NEPOOL is to run this regional stakeholder process.[iii] Unlike stakeholder processes at other RTOs/ISOs, NEPOOL does not allow attendance by the public at its stakeholder meetings, either in person or virtually. Only NEPOOL members, representatives of the New England States Committee on Electricity (discussed below), ISO-NE representatives, and invited guests are permitted to attend the meetings.

NEPOOL members participate in the activities of four committees, including three technical committees (the Markets Committee, Transmission Committee, and the Reliability Committee), and the top-level NEPOOL Committee, which is called the Participants Committee. (See the diagram below—also showing some working groups and a subcommittee). Proposals are assigned to the appropriate technical committee for consideration. If a proposal is approved in one of the technical committees, it goes up to the Participants Committee for consideration, potentially amendments, and voting. Moreover, even if a proposal before a technical committee is not approved by vote, if ISO-NE favors the proposal it may still bring it to the Participants Committee for a vote. Any NEPOOL member can also appeal actions taken by a technical committee to the Participants Committee for additional consideration.



iv

The Participants Committee is comprised of six voting sectors, including the Generation sector, the Transmission sector (traditional utilities and others that own transmission lines), the Publicly-Owned Entities sector (public power utilities), the Supplier sector (power marketers and brokers), the Alternative Resources sector (owners/developers of renewable generation, distributed generation, and demand response) and the End User sector (representatives of retail customers). The above descriptions are general and NEPOOL rules and agreements govern sector membership. Voting at the Participants Committee (and at the technical committees) is not done on a one-person/one-vote basis since there may be over-representation at a given meeting from one particular sector. Instead, a complicated scheme called sector-weighted voting is used, where each member's votes count toward the position taken on a question by the members that member's sector. Moreover, in order for votes to pass at the Participants Committee, there is required to be a 2/3 supermajority for non-market rule changes and a 60% supermajority for market rule changes.

In addition to the NEPOOL process, another stakeholder process in ISO-NE is the Planning Advisory Committee. True to its name, the Planning Advisory Committee provides a forum for input on regional planning documents such as the regional system plan and regional electric needs assessments. This Committee meets monthly, has no voting, and is advisory to ISO-NE. Unlike the NEPOOL process, the Planning Advisory Committee meetings are open to the public, although there may be confidential discussions of critical energy infrastructure.

Q. How are decisions made in ISO-NE?

A. A key issue in the region's development revolves around who has the initial filing rights to seek to change a tariff or market rules at FERC. These rights are known as "Section 205" filing rights based on a provision in the Federal Power Act. If an entity has Section 205 filing rights, it can submit proposals to FERC to initiate market changes without filing a formal complaint. In RTO/ISO regions, transmission owners share their Section 205 filing rights with RTOs/ISOs, and in some cases, with states. Section 205 filing rights are important because they ensure that the filer's perspectives are represented in the development of regional grid operator rules and procedures.

In New England, ISO-NE holds the Section 205 filing rights in most circumstances, which gives the ISO-NE Board and executives significant power in regional electricity matters. NEPOOL votes and the NEPOOL process are an important forum for developing and weighing potential changes to market rules and policies, but for the most part the NEPOOL votes are advisory to ISO-NE. ISO-NE and its Board have the power to pursue their own proposals at FERC through a Section 205 filing without NEPOOL support. That said, FERC takes into account the level of support in the region, as shown in NEPOOL voting results and in the comments or protests of participants in the relevant FERC docket, in weighing whether an ISO-NE proposal is just and reasonable.

Notably, NEPOOL votes can have a specific influence on FERC filings in one circumstance. If the NEPOOL Participants Committee, through its voting process, achieves supermajority support for a position on a market rule change that differs from an ISO-NE proposal to FERC, ISO-NE must include in its Section 205 filing a description of the alternative proposal supported by NEPOOL, ISO-NE's reasons for not adopting the proposal, and an explanation of why ISO-NE believes its own proposal is better than the alternative proposal. This is referred to as a "jump ball" filing because it puts the ISO-NE proposal and the proposal supported by the NEPOOL Participants Committee on a more equal footing before FERC. FERC then has the ability to approve either the ISO-NE or the NEPOOL proposal.

In addition to the above description of filing rights under Section 205 of the Federal Power Act, any individual or group also has the ability, without committee or ISO-NE Board approval, to file a complaint with FERC. Under Section 206 of Federal Power Act, one can file a complaint at FERC to contest the justness and reasonableness of market rules that have already received approval and are in operation.

Q. What are NESCOE and NECPUC?

A. The New England States Committee on Electricity, or NESCOE, is the Regional State Committee for ISO-NE.[v] Through NESCOE, the states seek to influence favorable electric policies, planning, and market rules for the region. FERC has encouraged the various RTOs/ISOs around the country to develop Regional State Committees as a way to coordinate and advance state views on electricity markets and planning. The Governors in New England appoint

representatives to NESCOE, which function as a Board of Managers. There are also full-time NESCOE staffers who help to represent its interests in ISO-New England, NEPOOL, and FERC matters.

States also express their views on regional electricity matters through the New England Conference of Public Utility Commissions, or NECPUC. The state utility commissions have an interest in and experience with electricity markets and reliability through oversight of utilities in their state.[vi]

Both NESCOE and NECPUC are involved in NEPOOL matters and discussions but as a matter of choice do not belong to sectors or engage in voting. Some state consumer advocate agencies do get involved with the NEPOOL end user sector and do vote in NEPOOL proceedings.

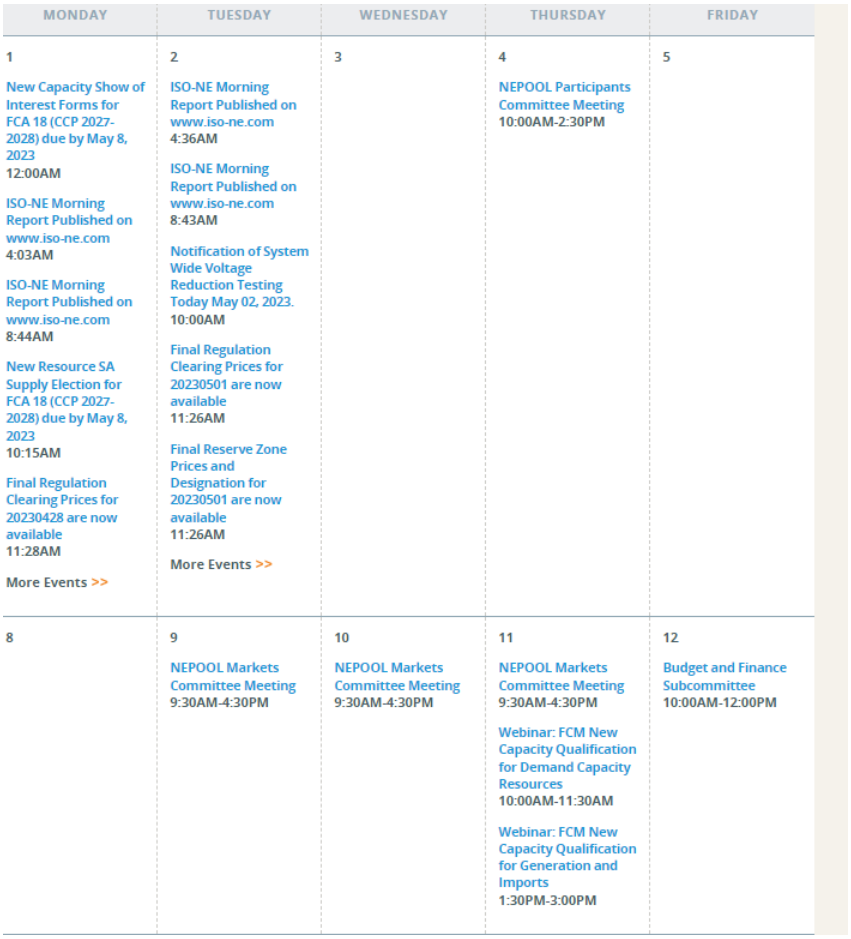
Q. What is the Consumer Liaison Group?

A. The Consumer Liaison Group (CLG) is an educational forum, authorized by FERC, for the exchange of information between ISO-NE and electricity consumers in New England.[vii] Unlike NESCOE, NECPUC or other NEPOOL stakeholders, CLG does not advocate or take positions. It holds four meetings a year, open to the public, that include speakers and panel discussions on issues of regional electricity interest. Each meeting includes a presentation from ISO-NE on current and upcoming regional electric issues and initiatives that are being raised at NEPOOL and ISO-NE. You can keep track of upcoming CLG events through their website listed in the endnote.

Q. How can people interested in ISO-NE and NEPOOL matters keep track of what is going on?

A. The ISO-NE Calendar provides a listing of ISO-NE and NEPOOL events and opportunities, including NEPOOL meetings, ISO-NE board meetings, webinars, CLG meetings, and more, with details on events and the ability to sort.[viii]

Here is a sample of a two-week period on the ISO-NE calendar:



MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
1 New Capacity Show of Interest Forms for FCA 18 (CCP 2027-2028) due by May 8, 2023 12:00AM ISO-NE Morning Report Published on www.iso-ne.com 4:03AM ISO-NE Morning Report Published on www.iso-ne.com 8:44AM New Resource SA Supply Election for FCA 18 (CCP 2027-2028) due by May 8, 2023 10:15AM Final Regulation Clearing Prices for 20230428 are now available 11:28AM More Events >>	2 ISO-NE Morning Report Published on www.iso-ne.com 4:36AM ISO-NE Morning Report Published on www.iso-ne.com 8:43AM Notification of System Wide Voltage Reduction Testing Today May 02, 2023. 10:00AM Final Regulation Clearing Prices for 20230501 are now available 11:26AM Final Reserve Zone Prices and Designation for 20230501 are now available 11:26AM More Events >>	3	4 NEPOOL Participants Committee Meeting 10:00AM-2:30PM	5
8	9 NEPOOL Markets Committee Meeting 9:30AM-4:30PM	10 NEPOOL Markets Committee Meeting 9:30AM-4:30PM	11 NEPOOL Markets Committee Meeting 9:30AM-4:30PM Webinar: FCM New Capacity Qualification for Demand Capacity Resources 10:00AM-11:30AM Webinar: FCM New Capacity Qualification for Generation and Imports 1:30PM-3:00PM	12 Budget and Finance Subcommittee 10:00AM-12:00PM

If you click on a link for a meeting, it provides a wealth of information, including the location and tele-conference info for the meeting, a contact person, agendas, minutes of prior meetings, and copies of presentations.

Q. How can a person or group interested in ISO-NE regional electricity issues and stakeholder processes influence the decisions made for the region?

A. Given the limitation on attendance at NEPOOL stakeholder meetings to members, such an interested person or group should consider NEPOOL membership if they can meet the financial requirements. If that is not possible, as noted above, the Consumer Liaison Group quarterly forums provide public access to ISO-NE and other stakeholders for education and informal dialogue. Beyond that, the best advice might be to discuss your concerns and coordinate your efforts with organizations or individuals who share your perspectives and have familiarity with ISO-NE and NEPOOL processes. This might include discussing issues with your state consumer counsel's office,[ix] state energy office through its NESCOE representative (see endnote v), your state public utility commission, [x] or communicating with a non-governmental advocacy organization that is involved in NEPOOL matters and may share your views. Whatever your interests or concerns may be, you are very likely to find that there are like-minded NEPOOL

stakeholders that are already participating actively and would appreciate your input and support.

Q. How do I learn more about ISO-NE and regional electric affairs?

A. The ISO-NE website is an excellent place to start.[xi] The "Participate" link on the front of the website provides access to basic and advanced educational materials, upcoming courses, ISO-NE tariffs, manuals and procedures, as well as NEPOOL information. The NEPOOL website also contains a calendar of upcoming events and meetings, a library of reports and presentations, information about current members and the sector to which they belong, membership options, and information about current issues and studies.

FERC also has resources that can help you gain more background on the electric industry generally, with some specifics on ISO-NE, in its 2020 Energy Primer.[xii] If you would like more information about ISO-NE, you may also contact the Office of Public Participation (OPP) for information as well as help with navigating FERC's web resources. You may reach OPP by e-mail at OPP@ferc.gov or by phone at (202) 502-6595. OPP also has its own area on the FERC website, https://www.ferc.gov/OPP.

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[i] Graphic developed by the National Energy Education Development Project, Electricity, at 56 (2017), http://www.need.org/Files/curriculum/infobook/Elec1S.pdf.

[ii] https://www.iso-ne.com/about/corporate-governance/board

[iii] You can learn more about NEPOOL at its website, https://nepool.com/

[iv] Graphic From the ISO-NE website (training module on NEPOOL).

[v] https://nescoe.com/

[vi] https://www.necpuc.org/

[vii] https://www.iso-ne.com/committees/industry-collaborations/consumer-liaison

[viii] https://www.iso-ne.com/calendar/?eventDate=20230516&

[ix] You can find most state consumer advocate offices here: https://www.nasuca.org/members/

[x] You can find your state commission here: https://naruc.org/about-naruc/regulatory-commissions/

[xi] https://www.iso-ne.com/

[xii] https://www.ferc.gov/sites/default/files/2020-06/energy-primer-2020.pdf